

SHUGAYEV, B.B.; SHADURSKIY, K.S., professor, zaveduyushchiy.

Registration of blood pressure and respiration in dogs without narcosis.
Farm. 1 toks. 16 no.3:51-53 My-Je '53. (MLRA 6:7)

1. Kafedra farmakologii Yaroslavskogo meditsinskogo instituta.
(Blood pressure) (Respiration)

SHUBAL V, B. A.

SHUBAYEV, B. A.: "Pharmacological and toxicological properties of phosphorus-organic compounds (alkylphosphates)," Minsk State Medical Inst. Minsk, 1955. (Dissertation For the Degree of Candidate in Medical Sciences.)

Knizhnaya letopis', No. 39, 1956. Moscow.

SHUVAKOV, V.B.

"Alkyl Pyrophosphates, Their Pharmacological and Toxicological
Properties"
paper presented at the First Conference on Phosphorous Compounds,
Kazan, 9-10 Dec 56

SI: B-3,034,841

SHUGAYEV, B. B. (Minsk State Medical Institute)

"Alkylpyrophosphates, Their Pharmacological and Toxicological Properties"
(Alkilpirofosfaty, ikh farmakilogicheskkiye i toksikologicheskkiye svoystva)

Chemistry and Uses of Organophosphorous Compounds
(Khimiya i primeneniye fosfororganicheskikh soyedneniy),
Trudy of First Conference, 8-10 December 1955, Kazan,
pp. Published by Kazan Affil. AS USSR, 1957

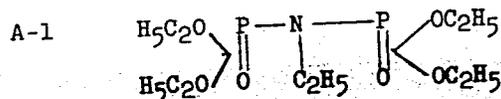
301-312

Report discussed by K. S. Shadurskiy (Minsk State Medical Inst.), M. A. ALUF
(Kazan State Med. Inst.), L. V. CHUGUNOVA (Kazan State Inst. of the Advanced
Training of Physicians im. V. I. Lenin), N. I. VYLEGZHANIN (Kazan State Inst.
for the Advanced Training of Physicians), M. Ya. MIKHEL'SON (1st Leningrad
Med. Inst. im. Acad. I. P. Pavlov).

SHUGAYEV, 1955

"Pharmacological and Toxicological Properties of Organic Derivatives of Amides of Diphosphoric Acids," by B. B. Shugayev, Chair of Pharmacology (head, Prof. K. S. Shadurskiy), Minsk Medical Institute, Farmakologiya i Toksikologiya, Vol 20, No 2, Mar/Apr 57, pp 30-35

This work reports the results of investigations conducted to determine the comparative effectiveness and toxicity of octamethyltetraamidopyrophosphate (OMOA, A-15), one of the group of amide derivatives of alkylpyrophosphates in which oxygen was retained as the bond between the atoms of phosphorus, and new organophosphorus compounds in which the oxygen bond between the phosphorus atoms was replaced by nitrogen. The new compounds were synthesized at the laboratory of the Kazan Affiliate of the Academy of Sciences USSR headed by B. A. Arbuzov. These new compounds are known tentatively as

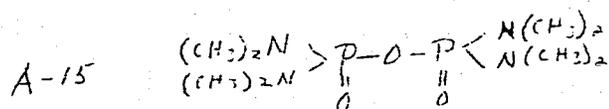
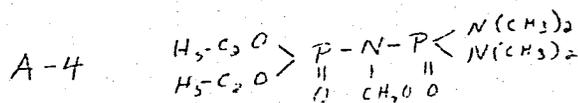
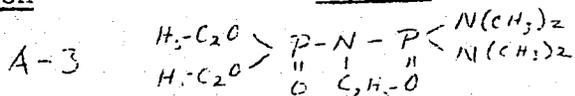


USSR / Pharmacology, Toxicology, Cholinergic Drugs. V

Abs Jour : Ref Zhur - Biol., No 20, 1953, No 94233

Preparation

Formula



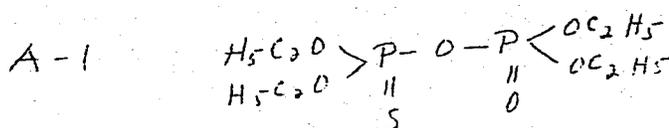
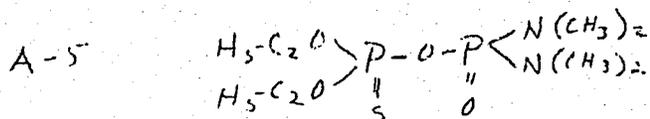
Card 2/5

USSR / Pharmacology, Toxicology, Cholinergic Drugs. V

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 94233

Preparation

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Gard 3/5

Shugayev, I. I.

USSR / Pharmacology, Toxicology, Toxicology.

V

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 94339

Author : Shugayev, B.B.

Inst : Not given

Title : Pharmacological and Toxicological Properties
of Organic Derivatives of Diphosphoric Acid
Amides.

Orig Pub : Farmakol. i toksikologiya, 1957, 20, No. 2, 30-35

Abstract : A study of organic derivatives of diphosphoric acid amides has shown that these substances possess cholinergic and anticholinesterasic effects. The introduction of an alkylphosphate "nitrogenous bridge" instead of oxygen into the molecule and the introduction of dimethylamide groups into the side position (formulas are given) lowers the toxicity and slows down the cholinergic effect. -- H. Yu. Vysotskaya.

Card 1/1

MATESHUK, V.P.; NIKITIN, V.M.; SHUGAYEV, B.B.

Data of kymographic recording of arterial pressure, pulse and respiration during surgery on the stomach with the use of various types of anesthesia. Eksper. khir. i anest. 8 no.4:69-72 JI-Ag '63. (MIRA 17:5)

1. Kafedra fakul'tetskoy khirurgii (zaveduyushchiy - prof. V.P. Mateshuk) Yaroslavskogo meditsinskogo instituta.

FINOGEYEV, P., prepodavatel'; SHUGAYEV, F., prepodavatel'

"Financing branches of the national economy." Reviewed by

P. Finogeev, F. Shugaev. Fin. SSSR 19 no.1:89-92 Ja '58.

(MIRA 11:2)

1.Moskovskiy finansovyy tekhnikum (for Finogeyev). 2.Zvenigorod-
skiy finansovyy tekhnikum (for Shugayev).

(Finance)

10.6121
26.2111

24563

S/055/61/000/002/004/007
C111/C222

AUTHOR: Shugayev, F.V.

TITLE: Supersonic flow around axialsymmetric blunt bodies with a detached shock wave

PERIODICAL: Moscow. Universitet. Vestnik. Seriya I. Matematika, mekhanika, no.2, 1961, 46-53

TEXT: The author considers an axialsymmetric body in a supersonic homogeneous flow of an ideal gas. Putting the x-axis in the flow direction and putting as in (Ref.3: R.Vaglio-Laurin, A.Ferri. Theoretical investigation of the flow field about blunt-nosed bodies in supersonic flight. J. Aero/Space Sci., 25, 761-770, 1958) $\tau = \frac{2\Psi(x,y)}{y^2}$, where

$\Psi(x,y)$ is the flow function then the gas dynamical equations read

$$\frac{\partial}{\partial \tau} \left(\frac{U}{V} - \frac{\tau}{RV} \right) + \frac{1}{2} \frac{\partial}{\partial y} \left(\frac{V}{RV} \right) = 0, \quad \frac{\partial}{\partial \tau} (P + \tau U) - \frac{1}{2y} \frac{\partial}{\partial y} (\tau y^2) = 0, \quad (1)$$

$$W^2 + \frac{2\gamma}{\gamma-1} \frac{P}{R} = a, \quad PR^{-\gamma} = \left(\frac{\gamma-1}{\gamma+1} \right)^\gamma f(\tau y^2),$$

where $W^2 = U^2 + V^2$, $U = \frac{u}{u_\infty}$, $V = \frac{v}{v_\infty}$, $R = \frac{r}{r_\infty}$, $P = \frac{p}{p_\infty}$, γ ---adiabatic
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Supersonic flow around...

exponent, $a = 1 + \frac{2}{\gamma-1} \frac{1}{M_\infty^2}$. From the two last equations it follows

$$P = \left(\frac{\gamma+1}{2\gamma} \right)^{\frac{\gamma}{\gamma-1}} \frac{\gamma}{a^{\frac{\gamma}{\gamma-1}}} \left(1 - \frac{W^2}{a} \right)^{\frac{\gamma}{\gamma-1}} [f(\tau y^2)]^{-\frac{1}{\gamma-1}}, \quad (2)$$

$$R = \frac{\gamma+1}{\gamma-1} \left(\frac{\gamma+1}{2\gamma} \right)^{\frac{1}{\gamma-1}} \frac{1}{a^{\frac{1}{\gamma-1}}} \left(1 - \frac{W^2}{a} \right)^{\frac{1}{\gamma-1}} [f(\tau y^2)]^{-\frac{1}{\gamma-1}}.$$

The function $f(\tau y^2)$ can be obtained from the conditions on the shock wave.

In the τ, y -plane the equation of the body reads $\tau = 0$ and the equation of the shock wave reads $\tau = 1$. For an approximate solution of the system the region between the body and the shock wave is subdivided by the

straight lines $\tau = \frac{i-1}{m+1}$, $i=2, \dots, m+1$. The functions $U(\tau, y)$ and

$\varphi(\tau, y) = \frac{y}{RV}$ are approximated by

$$U(\tau, y) = U_0(y) + \sum_{l=1}^{m+1} a_l \tau^l, \quad \varphi(\tau, y) = \varphi_0(y) + \sum_{l=1}^{m+1} b_l \tau^l. \quad (3)$$

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Supersonic flow around...

Only the first approximation ($m = 1$) is considered in detail. It reads

$$U(\tau, y) = U_0(y) + [U_1(y) - U_0(y)]\tau, \quad \varphi(\tau, y) = \varphi_0(y) + [\varphi_1(y) - \varphi_0(y)]\tau. \quad (4)$$

After the elimination of P and R from (1) and the integration, for the determination of U_0 and U_1 it follows

$$y \frac{d}{dy} (U_0 + U_1) + 2(U_0 + U_1) = 2 \frac{\gamma-1}{\gamma} aA \left[1 - \left(1 - \frac{W_0^2}{a} \right)^{\frac{\gamma}{\gamma-1}} \right], \quad (5)$$

$$\frac{d\tau_0}{dy} + \frac{d\tau_1}{dy} = 4 \left[X'(y) - \sqrt{\frac{\gamma+1}{2}} \sqrt{\frac{U_1}{1 - \frac{\gamma+1}{2} U_1}} \right],$$

X

$$A = \frac{\frac{\gamma+1}{\gamma-1} \left[\frac{(\gamma+1)^2}{4\gamma} \right]^{\frac{1}{\gamma-1}}}{a \left(1 - \frac{\gamma-1}{2\gamma} \frac{1}{M_\infty^2} \right)^{\frac{1}{\gamma-1}}}.$$

where $X(y)$ is the equation of the contour of the body in the physical

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X

Supersonic flow around...

plane.

For the distance between the body and the shock wave the author obtains

$$D = \frac{1}{2} \int_0^1 \varphi(\tau, 0) d\tau \quad (6)$$

and for the resistance coefficient C_x of the nose

$$C_x = 2 \left[P_{kr} - \int_0^1 v(\tau, y) d\tau \right], \quad (7)$$

where $P_{kr} = \frac{\gamma-1}{2\gamma} a^2$ is the brake pressure, and y is the radius of the circle which borders the part in question of the body. If $\alpha = \left(\frac{dw_0}{ds} \right)_{kr}$ is the velocity gradient in the critical point, and if the nose is blunt then it holds

$$D \left(\frac{dw_0}{ds} \right)_{kr} = \frac{1}{4} \left[\frac{1}{A} + \frac{2}{\sqrt{A(\zeta+1)}} \frac{\frac{\gamma-1}{\gamma+1} a}{1 - \frac{\gamma-1}{\zeta+1} a} \right].$$

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Supersonic flow around...

As an example the author considers a cylinder the base of which is opposed to the flow; $\gamma = 1.4$. Here the approximating system reads

$$y \frac{dU_1}{dy} + 2U_1 = \frac{4}{7} aA \left[1 - \left(1 - \frac{V_0^2}{a^2} \right)^{\frac{7}{2}} \right], \quad (8)$$

$$\frac{d\varphi_0}{du} + \frac{d\varphi_1}{dy} = -4 \sqrt{\frac{6}{5}} \sqrt{\frac{U_1}{1 - \frac{6}{5} U_1}}$$

where

$$\varphi_0 = \frac{y}{A \left(1 - \frac{V_0^2}{a^2} \right)^{\frac{5}{2}} V_0}, \quad \varphi_1 = \sqrt{\frac{5}{6}} \frac{\frac{a}{6} \left(1 - \frac{6}{5a} U_1 \right)}{1 - \frac{a}{6} \left(1 - \frac{U_1}{1 - \frac{a}{6}} \right)} \frac{y}{U_1 \left(1 - \frac{6}{5} U_1 \right)}$$

X

The first approximation obtained with the computer "Strela" was compared with experimental results of (Ref.6: J.C.Boison, H.A.Curtiss. An experimental investigation of blunt body stagnation point velocity gradient. ARS Journal, 29, 130-135, 1959) and (Ref.7: H.Serbin. Card 5/8

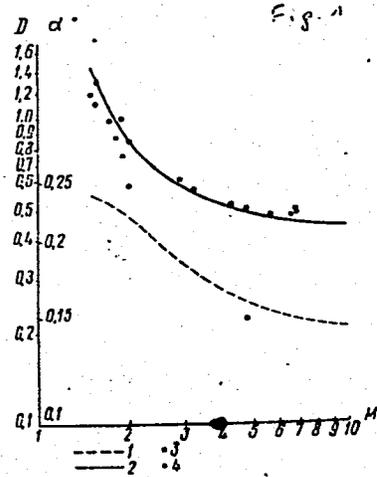
Supersonic flow around...

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X

Supersonic flow around blunt bodies. J.Aeronaut.Sci.,25, 58-59, 1958).
The results are shown in figure 1 and figure 2.

Fig.1: The dependence on the number M of the dimensionless velocity gradient in the critical point and the distance between the shock wave and the body for a flow around a blunt-nosed cylinder: 1--calculated curve for $\alpha = \left(\frac{dw}{ds}\right)_{kr}$, 2 -- calculated curve for the distance D between the shock wave and the body, 3--experimental data for D (Ref.6,7), 4 -- experimental values of α (Ref.6).

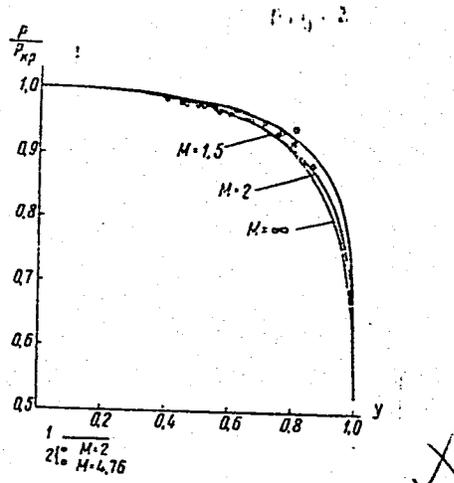


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Supersonic flow around...

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Fig.2: The distribution of the pressure on the front face of the blunt-nosed cylinder for different numbers M : 1--calculated curves, 2 -- experiment for $M = 2$ and $M = 4.76$ (Ref.6).



The author mentions A.A.Dorodnitsyn. He thanks A.S.Predvoditelev,
Card 7/8

24563

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C111/C222

Supersonic flow around...

A.A.Pomerantsev, V.B.Glasko and O.M.Belotserkovskiy. There are 2 Soviet-bloc and 5 non-Soviet-bloc references. The four most recent references to English-language publications read as follows: M.D. Van Dyke. The Supersonic blunt-body problem - Review and extension. J. Aero/Space Sci., 25, 485-496, 1958. P.R.Garabedian, H.M.Lieberstein. On the numerical calculation of detached bow shock waves in hypersonic flow. J.Aeronaut. Sci., 25, 109-118, 1958. J.C.Boison, H.A.Curtiss. An experimental investigation of blunt body stagnation point velocity gradient. ARS Journal, 29, 130-135, 1959. H.Serbin. Supersonic flow around blunt bodies. J.Aeronaut.Sci., 25, 58-59, 1958.

ASSOCIATION:Kafedra molekulyarnoy fiziki (Chair of Molecular Physics) *em64*

SUBMITTED: April 18, 1960

Card 8/8

SHUGAYEV, F.V. (Moskva)

Interaction between a supersonic flow and an obstacle.
PMTF no. 6:101-103 N=D '63. (MIRA 17:7)

ACCESSION NR: APh013394

S/0040/64/028/001/0184/0185

AUTHOR: Shugayev, F. V. (Moscow)

TITLE: Axisymmetric flow far from a body in a neighborhood of the axis with number M_{∞} close to unity

SOURCE: Prikladnaya matematika i mekhanika, v. 28, no. 1, 1964, 184-185

TOPIC TAGS: axisymmetric flow, blunt body, unperturbed flow, critical velocity, change of variables, shock wave, limit line

ABSTRACT: The author considers a flow, whose number M_{∞} differs little from unity, around an axisymmetric blunt body. He studies the flow in a neighborhood of the axis at a large distance from a body above the flow. The origin of the coordinates is at the critical point of the body and the x axis coincides with the direction of the unperturbed flow. In a neighborhood of the axis

$$u = f(\tau) + \sum_1^{\infty} \alpha_n(\tau) y^{2n}, \quad v = \sum_1^{\infty} \beta_n(\tau) y^{2n-1}, \quad \tau = \frac{2\psi(x, y)}{y^2} \quad (1)$$

Here u, v are velocity components along the x, y axis related to the critical
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ACCESSION NR: AP4013394

velocity, $\psi(x,y)$ is the flow function, and $f(\tau_1)$ is the value of the velocity on the axis. The correction needed because of the deviation of the number M_{∞} from unity is proportional to $\Delta M_{\infty}^{2/3}$. This shows that a formula of K. G. Guderley (Teoriya okolozvukovykh techeniy. II, 1960, gl. XI) is not applicable for flow at a large distance from a blunt body in a neighborhood of the axis. The author obtains an asymptotic formula for the function $D(M_{\infty})$ when $M_{\infty} \sim 1$ (D is the distance between the shock wave and the axisymmetric blunt body). Orig. art. has: 9 formulas.

ASSOCIATION: none

SUBMITTED: 24Apr63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: AI

NO REF SOV: 001

OTHER: 003

Card 2/2

L 01241-67 EWT(1)/EWP(m) WW

ACC NR: AP6032938

SOURCE CODE: UR/0208/66/006/005/0930/0934

AUTHOR: Belotserkovskiy, O. M. (Moscow); Sedova, Ye. S. (Moscow); Shugayev, F. V. (Moscow)

ORG: none

653

TITLE: Supersonic flow past blunted bodies of revolution with contour discontinuity

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 6, no. 5, 1966, 930-934

TOPIC TAGS: supersonic aerodynamics, supersonic flow, shock wave, integral method, flow field, flow analysis

ABSTRACT: This paper deals with application of the direct method to the problem of supersonic flow past blunted bodies with a contour discontinuity which determines the location of the sonic point. A solution is sought by considering the scheme II of the method of integral relations [Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 4, no. 1, 1964] and using the Vaglio-Laurin asymptotic solution perfected and reduced to a form convenient for computers. Supersonic flow of a perfect gas past an axisymmetric body of revolution at an angle of attack is investigated and the case is considered when the flow velocity at the corner point attains the velocity of sound, and when the shape of the body behind the corner point has no effect on subsonic flow near the nose. A solution is obtained for the flow field bounded by

Card 1/3

UDC: 517.9:533.011

L 01241-67

ACC NR: AP6032938

limiting characteristic and does not exceed 2%, while on the axis and on average characteristic, it is about 0.5%. Orig. art. has: 5 figures, 4 formulas, and 1 table.

[AB]

SUB CODE: 20/ SUBM DATE: 21Jan66/ ORIG REF: 003/ OTH REF: 003/ ATD PRESS: 5097

Card 3/3 hs

L 42060-65 FSS-2/EWT(1)/EWG(v)/EWA(d)/T/EED(b)-3 Pn-4/Pe-5/Pae-2 IJP(c) GW

ACCESSION NR: AP5010929

UR/0286/65/000/007/0114/0114

AUTHORS: Shugayev, G. A.; Starodubtsev, I. S.; Zakharov, V. I.

41
B

TITLE: Aerophotographic collimator sight. Class 42, No. 169822

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 114

TOPIC TAGS: aerial photography, photographic optics, photographic device 10

ABSTRACT: This Author Certificate presents an aerophotographic collimator sight containing a grid of filaments with the course indicating lines (see Fig. 1 on the Enclosure). The grid may be projected onto the surface of the ground by means of an optical device and a device for stabilizing the sight axis at a desired azimuth. To widen the angle of vision of the sight, the optical device is made in the form of a semitransparent curved mirror, as, for instance, parabolic-spherical. The grid is placed in the focus of this mirror. In an alternate design the rotor of the relay receiver is placed on the rotation axis of the sight. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 25Feb64

ENCL: 01

SUB CODE: ES

NO REF SOV: 000

OTHER: 000

Card 1/2

L 42060-65

ACCESSION NR: AP5010929

ENCLOSURE: 01

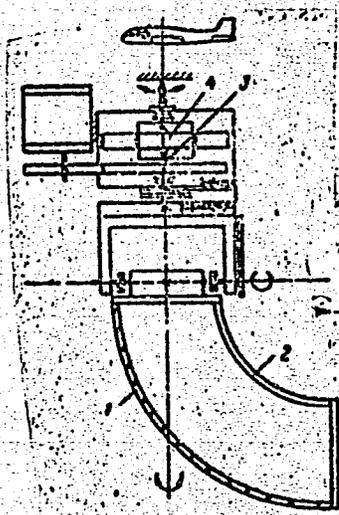


Fig. 1. 1- mirror; 2- grid of threads;
3- rotation axis of the sight; 4- rotor

am
Card 2/2

AUTHORS: Borisenko, N.D. and Shugayev, I.A., Mining Engineers SCV-127-58-3-3/24

TITLE: Open-pit Exploitation of the Samotkanskoye Deposit (Razrabotka Samotkanskogo mestorozhdeniya otkrytym sposobom)

PERIODICAL: Gornyy zhurnal, 1958, Nr 3, pp 12 - 17 (USSR)

ABSTRACT: This article describes the projected method of exploitation of the Samotkanskoye deposit of titanium ores. The project was developed by the Institute GSPI-1 and the authors who took part in its elaboration give a detailed description of the future exploitation. The deposit is formed by the sand formations of the Sarmatian stage and are covered by the quaternary formations 6 to 60 m thick. At present, work started for the removal of these formations, and the construction of the railway siding and of the road for trucks, is nearing completion. There are 2 tables, 1 map and 2 diagrams.

ASSOCIATION: Institut GSPI-1 (The GSPI-1 Institute)

1. Titanium ores--Production
2. Mining engineering

Card 1/1

POTENKIN, K.V.; SPITSYN, A.; SHUGAYEV, I.A.; POL'KIN, S.I.;
SAKSAGANSKAYA, I.P.; ANDREYEV, F.I.; POLYAKOV, R.M.,
red.; VERIGO, K.M., red.

[Production of zirconium and hafnium in capitalist countries]
Proizvodstvo tsirkoniia i gafniia v kapitalisticheskikh str-
nakh. Moskva, Pts.1-3. 1962. 157 p. (MIRA 17:4)

1. Moscow. Tsentral'nyy institut informatsii tsvetnoy metal-
lurgii.

SHUGAYEV, L.A

ROZENSHTAYN, Ya.I.; SHUGAYEV, L.A.

Underground molasses storage tank made of local building materials.
Spart.prom.20 no.1:21-22 '54. (MIRA 7:5)
(Molasses--Storage)

SHUGAYEV, L. S.

"Automatic Frequency and Power Regulators," Elek. Stan., no. 8, 1949. Engr.

SHUGAYEV, L. S. and LIKHNITSKIY, M. I.

"First Results of Industrial Production of Telemetric Devices" from the book
Remote Control of Power Systems, published by the AS USSR, 1954.

SHUGAYEV, S., inzh.

Metering electric power consumption in cold storage plants. Khol.tekh.
35 no.5:57 S-0 '58. (MIRA 11:11)
(Cold storage warehouses) (Electric meters)

SHUGAYEV, V.A. (Leningrad)

Effect of reserpine on the conditioned response activity in
white mice. Farm. i toks. 28 no.1:3-4 Ja-F '65.

(MIRA 18:12)

1. Submitted October 21, 1963.

SHUGAYEV, V. V.

Physicomechanical Properties of Grounds of Old River Beds
Voprosy geotekhniki, Sb. 1, 1953, pp 162-182

The author expounds the results of investigations into the physico-mechanical properties of monolith samples of grounds of old river beds (meanders) of various ages, which samples were taken from drilled wells and pits. Because of the inhomogeneity of the grounds, the mean indexes to the properties of the monoliths were taken. It was established that the grounds of old river beds of different age are distinguished by their physical and compressional properties. (RZhGeol, No 3, 1955)

SO: Sum. No. 639, 2 Sep 55

KHAYDUKOV, G.K., kand.tekhn.nauk; SHUGAYEV, V.V., inzh.

Prestressed reinforced concrete shell flumes for irrigation systems.
Gidr. i mel. 14 no.12:8-17 D '62. (MIRA 16:5)

1. Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii
stroitel'stva i arkhitektury SSSR.
(Irrigation canals and flumes)

SHUGAYEV, V.V., inzh.

Selecting the shape of the cross section and the method of calculating
precast reinforced flumes for irrigation systems. Gidr. i mel.
15 no.11:30-40 N '63. (MIRA 17:1)

1. Nauchno-issledovatel'skiy institut betona i zhelezobetona
Gosstroya SSSR.

SHUGAYEV, V.V.

Estimating the sagging of loess foundations receiving extra
pressure. Vop. geotekh. no.6:104-107 '63. (MIRA 17:9)

LYUTIKOV, A.P., inzh.; NIKOL'SKIY, A.Yu., inzh.; SHAMRAY, V.M., inzh.;
SHUGAYEV, V.V., inzh.

Mesh-reinforced concrete on building sites of water development
projects. Trudy Giprovdkhoza no.26:73-123 '64.

(MIRA 18:6)

SHUGAYEV, V.V., kand.tekhn.nauk; NAZAROV, A.I., inzh.

Manufacture of thin-walled reinforced concrete members by the
vibratory bending method. Gidr. i mel. 17 no.4:1-12 Ap '65.
(MIRA 18:5)

1. Nauchno-issledovatel'skiy institut betona i zhelezobetona
Gosstroya SSSR.

ACC NR: AN7004821 SOURCE CODE: UR/9049/67/000/015/0004/0004

AUTHOR: Shugayev, Ye.

ORG: none

TITLE: Research on the Tunguska Meteorite

SOURCE: Uchitel'skaya gazeta, no. 15, 2 Feb 67, p. 4, cols. 1-6

TOPIC TAGS: meteorite/ ~~meteorite~~ Tunguska area

ABSTRACT:

Research made to understand the riddle of the Tunguska meteorite is reviewed. Many scientists consider that the time has come when analysis of all the available material will soon yield a final solution of the phenomenon.

SUB CODE: 03/ SUBM DATE: none/ ATD PRESS: 5114

Card 1/1

UDC: none

Vashkov, V.I., prof.; SHUGAYEVA, A.S.

Possibility of using diocide in disinfection. Khim. i med. no.10:
15-17 '59. (MIRA 13:2)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo dezinfektsionnogo
instituta (dir. A.A. Ryzhov).
(DIOCIDE) (DISINFECTION AND DISINFECTANTS)

USSR/Microbiology. General Microbiology. System-
atics, Morphology, Cytology.

F-1

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 62199

Author : Spirin A.S., Belozerskiy A.N., Shugayeva N.V.,
Vanyushin B.F.

Inst : -
Title : Studies of the Specificity of the Species of
Nucleic Acids in Bacteria.

Orig Pub : Biokhimiya, 1957, 22, No 4, 744-754

Abstract : The RNA and DNA nucleotide composition was studied
in 19 different species of bacteria and acti-
nomycetes. The nucleotide composition of DNA
uncovers a distinct specificity of species, being
very similar in closely related species, and dif-
fering sharply in distant species. In this,
Proteus vulgaris and Aerobacter aerogenes differ
considerably, according to the DNA composition,
from other species. Enterobacteriaceae force

Card : 1/3

SHUGAYEVA, N.V.

BELOZERSKIY, A.N.; SHUGAYEVA, N.V.; SPIRIN, A.S.

Desoxyribonucleic acid composition in various actinomyce species.
Dokl. AN SSSR 119 no.2:330-332 Mr '58. (MIRA 11:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova i
Institut biokhimii im. A.N. Bakha AN SSSR. Predstavleno akademikom
A.I. Oparinym.
(NUCLEIC ACID) (ACTINOMYCES)

SHUGAYEVA, T.M., kandidat tekhnicheskikh nauk

A new optical element for automobile headlights. Avt. trakt.
prom. no.7:insert. J1 '55. (MLRA 8:9)

1. Nauchno-issledovatel'skiy institut avtopriborov
(Automobiles--Lighting)

SHUGAYEVSKAYA, O.V.; KHOMULLO, A.S.

On one method for separation of spores and pollen from
rocks. Paleont. zhur. no.3:133-137 '65. (MIRA 18:9)

1. Dal'nevostochnyy geologicheskii institut Sibirskogo
otdeleniya AN SSSR.

SHUGAILIN, O.V.

Against subjectivism in the so-called theory of relativity. Visnyk
AN URSSR 24 no.11:52-64 N '53. (MIRA 6:12)
(Relativity (Physics))

SHUGAYLIN, A.V.

OMEL'YANOVSKIY, M.E., otvetstvennyy redaktor; SINEL'NIKOV, K.D., redaktor;
LIFSHITS, I.M., redaktor; OSTRYANIN, D.F., doktor filosofskikh nauk,
redaktor; PASECHNIK, M.V., kandidat fiziko-matematicheskikh nauk,
redaktor; SHUGAYLIN, A.V., kandidat filosofskikh nauk, redaktor;
AGUF, M.A., redaktor izdatel'stva; SIVACHENKO, Ye.K., tekhnicheskii
redaktor

[Philosophical problems in modern physics] Filozofskie voprosy
sovremennoi fiziki. Kiev, 1956. 250 p. (MLRA 10:1)

1. Akademiya nauk URSR, Kiyev. 2. Deystvitel'nyy chlen AN USSR
(for Omel'yanovskiy, Sinel'nikov) 3. Chlen-korrespondent AN USSR
(for Lifshits)
(Physics--Philosophy)

SHUGAYLIN, Aleksandr Vasil'yevich; ZHMUDSKIY, A.Z., kandidat fiziko-matemati-
cheskikh nauk, otvetstvennyy redaktor; SHIKAN, V.L., redaktor izdatel'-
stva; RAKHLINA, N.P., tekhnicheskiy redaktor.

[P.N. Lebedev, outstanding physicist and materialist] Vydainshchiisia
fizik-materialist P.N. Lebedev. Kiev, Izd-vo Akad.nauk USSR. 1957. 173 p.
(MLBA 10:5)

(Lebedev, Petr Nikolaevich, 1866-1912)

SHUGAYLIN, A. V.

SHUGAYLIN, Aleksandr Vasil'yevich; DISHLEVIY, P.S., kand. filos. nauk, vidp. red.; BRATKO, Z.F., red.; MATVIICHUK, O.O., tekhn. red.

[Soviet physical science is in the forefront of the fight for a materialistic orientation of present-day physics] Radians'ka fizychna nauka - peredovy front borot'by za materialistychnyi napriam v suchasni fizytsi. Kyiv, Vyd-vo Akad. nauk URSR, 1958. 77 P. (MIRA 11:?)

(Physics--Philosophy)

BURKSER, Ye.S. [Burkser, I.E.S.]; GORDELADZE, Sh.G., kand.fiz.-mat.nauk;
CHEREDNICHENKO, V.I. [Cherednychenko, V.I.]; kand.fiz.-mat.nauk;
SHUGAYLIN, O.V. [Shuhaylin, O.V.], kand.filos.nauk

Evidences of evolution of small bodies in the solar system :
("Physical characteristics of comets" [in Russian] by S.K.
Vsekhsviatskii, Reviewed by I.E.S. Burkser and others. Visnyk AN
URSR 29 no.11:70-73 N '58. (MIRA 11:12)
(Comets) (Vsekhsviatskii, S.K.)

SAVIN, G.N. [Savin, H.M.]; SHUGAYLIN, A.V. [Shuhailin, O.V.]

V.I. Lenin and philosophical problems of mechanics. *Prykl.*
mekh. 6 no.2:121-124 '60. (MIRA 13:8)
(Lenin, Vladimir Il'ich, 1870-1924)

SHUGAYLIN, O.V. [Shuhailin, O.V.]

Republic conference on philosophical problems in biology.
Dop. AN URSSR no. 6: 830-835 '61. (MIRA 14:6)
(Biology—Philosophy)

GULYY, M.F., akademik, red.; KAVETSKIY, R.Ye., akademik, red.;
OSTRYANIN, D.F., red.; DZYUBKO, I.S., red.; SHUGAYLIN, A.V.,
doktor filos. nauk, red.; YEFIMOVA, M.I., ~~tekh.~~ red.

[Philosophical problems of contemporary biology; proceedings]
Filosofskie voprosy sovremennoi biologii; materialy. Kiev,
Izd-vo Akad. nauk USSR, 1962. 491 p. (MIRA 15:4)

1. Ukrainskoye soveshchaniye po filosofskim voprosam biologii,
Kiev, 1960. 2. Akademiya nauk USSR (for Gulyy, Kavetskiy).
3. Chlen-korrespondent Akademii nauk USSR (for Ostryanin).
4. Zamestitel' ministra vysshego i srednego spetsial'nogo
obrazovaniya USSR (for Dzyubko).
(BIOLOGY--PHILOSOPHY)

SHUGAYLO, V. T.

Shugaylo, V. T.

"Some Aspects of the Active Sources of Two Local Soil Actinomycetes." Min Health Ukrainain SSR. Dnepropetrovsk State Medical Inst. Dnepropetrovsk, 1955. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya letopis', No. 27, 2 July 1955

Orig Pub.

1, 95

AUTHORS: Izhak, I. A. , Shugurov, O. A.

57-28-3-14/33

TITLE: The Piezomodulus of Polycrystalline BaTiO₃ as Dependent on Unidirectional Pressure (Zavisimost' p'yezhomodulya polikristallicheseskogo BaTiO₃ ot odnostoronnego davleniya)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 3, pp.518-520 (USSR)

ABSTRACT: The piezomodulus of barium titanate d_{33} is connected with the spontaneous polarization P_2 through the equation (Reference 1)

$$d_{33} = \frac{\kappa_1 P_s \epsilon}{\pi}, \text{ where } \kappa_1 \approx 2,7 \cdot 10^{-12} \text{ cm}^2/\text{dyn (Reference$$

2). The authors here give the results of the investigation on the dependence of the piezomodulus of a polycrystalline BaTiO₃ on unidirectional pressure, where the piezoelectric polarization was in all experiments caused by an equal constant load. This was attained by applying a certain pressure, e.g. 200 kg/cm² to the sample and then additionally loading

Card 1/4

57-28-3-14/33

The Piezomodulus of Polycrystalline BaTiO_3 as Dependent on Unidirectional Pressure

the sample with 36 kg/cm^2 . The piezomodulus was determined according to the load produced in the faces of the sample on removal of the additional load (in contrast to the usual method of References 5, 6 and 7, where the piezoelectric polarization caused by the entire applied pressure is measured). The obtained data show that the piezomodulus of barium titanate decreases on a rise of pressure, as it follows from the assumption of an orientating action of the pressure upon the spontaneous polarization. Due to this orientation the polar moment of the domain of spontaneous polarization decreases along the pressure axis and increases at right angles to it. A decrease in the spontaneous polarization along the pressure axis according to the above-given formula (1) leads to a decrease in d_{33} . An additional polarizing field orientates the spontaneous domains in the direction of the field and thus diminishes the effect caused by the unidirectional pressure. It is further shown that the reciprocal value of d_{33} is linearly dependent on pressure. A deviation from the linearity is observed at pressures above 350 kg/cm^2 . In the domain where the linear dependence is preserved, the relation can be expressed by an empirical

Card 2/4

57-28-3-14/33

The Piezomodulus of Polycrystalline BaTiO₃ as Dependent on Unidirectional Pressure

formula $d_{33} = \frac{1}{A + B_p}$. The values of the coefficients A

and B on conditions of different constants of the polarizing fields are given in a table. Thus the observed effect of a decrease in the piezomodulus d_{33} under unidirectional pressure can be explained by the re-orientation of the polar moment of the domains of spontaneous polarization by this pressure. An additional confirmation of this hypothesis can be obtained from the comparison of the dependence of the piezomodulus on the pressure of newly polarized and aged samples. Formula (1) also contains the dielectric permeability ϵ . In the general case ϵ depends on pressure. But here ϵ is due to the induced linear polarization, little dependent on pressure (Reference 4). Therefore the dependence of the dielectric permeability ϵ on the pressure can be disregarded here. There are 3 figures, 1 table, and 8 references, 6 of which are Soviet.

Card 3/4

The Piezomodulus of Polycrystalline BaTiO₃ as Dependent on Unidirectional Pressure 57-28-3-14/33

ASSOCIATION: Dnepropetrovskiy gosudarstvennyy universitet
(Dnepropetrovsk State University)

SUBMITTED: August 10, 1957

1. Barium titanate---Electrical properties 2. Barium titanate
---Pressure 3. Pressure---Electrical effects 4. Piezoelectric
materials---Properties

Card 4/4

SHUGUROV, O.A. [Shuhurov, O.O.]

Changes in the flexor evoked by the contralateral stimulation
of the gray matter of the spinal cord. Fiziol. zhur. [Ukr.]
10 no.2:255-259 Mr-Apr '64. (M.RA 18:7)

1. Kafedra fiziologii cheloveka i zivotnykh Dnepropetrovskogo
universiteta.

GAVRILOV, B.; LADIYEV, R.; LOBURENKO, A.; CHUGAY, A.; SHUGUROV, V. (Kiyev)

Use of new technology reduces fire hazards. Pozh.delo 6 no.10:28
0 '60. (MIRA 13:10)

(Rubber industry--Fires and fire prevention)

ZVONAREV, I.; SENDERZON, E.; SHARUDO, I.; SHORIN, V.; SHUGUROV, V.;
YUSUPOV, T.

In memory of Aleksei Borisovich Travin. Geol. i geofiz. no.4:116-
119 '61. (MIRA 14:5)
(Travin, Aleksei Borisovich, 1908-1960)

SHARLOVSKAYA, M.S., kand. tekhn. nauk; ~~SHUGUROV, V.F.~~, kand. geol.-
mineral. nauk

Results of studying mineral impurities and ash of Cheremkhovo
coal. Teploenergetika 10 no.7:51-54 JI '63. (MIRA 16:7)

1. Khimiko-metallurgicheskiy institut i Institut geologii i
geofiziki Sibirskogo otdeleniya AN SSSR.
(Cheremkhovo Basin--Coal--Analysis)

SHUGUROV, V.F.

Quartz in the coal of the Kuznetsk Basin. Vop. bor' s sil.
v Sib. no.1:45-48 '61 (MIRA 16:12)

Mineral admixtures of the allothogenic group in some coals
of the Kuznetsk Basin. Ibid.:49-52

SHUGUROV, V.F.

Some allogenic minerals of coals from the Tom'-Usinsk region
of the Kuznetsk Basin. Mat. Tem. kom. no.1:61-66 '61.

(MIRA 17:2)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.

U S S R

✓ Triplet splitting of the terms of atoms with two valence $2p$ -electrons. A. P. Yutsis, V. K. Saugurov, and G. K. Tsyunaitis. *Zhur. Ekspl. i Teoret. Fiz.* 23, 617-24 (1952); *Science Abstr.* 56A, 730-1 (1953). -- Formulas are given for the splitting. With the help of analytical wave functions the triplet state is detd. for atoms of the He type in the configurations $2p^2$ and of the Be type in the configuration $1s^2p^2$. The triplet splitting of the Be atom in the configuration $1s^2p^2$ and also the splitting of the main configuration of the neutral C atom and of the doubly ionized O atom are detd. with the help of single electronic wave functions which are solutions of the equations of Fock's self-consistent

field. The theoretical results obtained are compared with the exptl. data. The data show that the triplet splitting detd. with the help of analytical single electronic wave functions is adequate for the study of the course of the triplet splitting in isoelectronic systems. Owing to the fact that the analytical wave functions are approx., there is a certain deviation between the theoretical results and the exptl. data. In the case of Be this deviation is considerable. The results obtained show that the triplet splitting calcul. with the aid of the single electronic wave functions of the F. self-consistent field agrees well with the exptl. data. The Be atom again represents an exception, in which the deviation between the theoretical and the exptl. values at the upper range of the triplet approaches 30% of the exptl. value. However, the use of the wave functions of the F. self-consistent field gives better agreement between the theoretical results and the exptl. data than the results obtained with the help of the analytical wave functions.

K. L. C.

VIL'nyus State Univ

SHUGUROV, V. K.

Dissertation: "Theoretical Determination of Splitting of Terms of Some Atoms."
Cand Phys-Math Sci, Vil'nyus State U, Vil'nyus, 1953. (Referativnyy Zhurnal-Fizika,
Moscow, Jun 54)

SO: SUM 318, 23 Dec 1954

Shugurov, V. K.

USSR 1

539.153

8534. The triplet splitting of terms of the carbon atom in configuration $1s^2 2s^2 2p^3$. V. K. SHUGUROV, YA. I. VIZBARAITE AND A. P. YUTSIS. *Dokl. Akad. Nauk SSSR*, 24, No. 3, 265-8 (1953) In Russian.

Expressions are given for the elements of the energy matrix of spin interaction, using the radial integral for an atom in the $1s^2 2s^2 2p^3$ configuration. The triplet splitting of C atoms in this configuration is determined, allowance being made for the non-diagonal matrix elements, with the use of one-electron wave-functions of a self-consistent field without quantum exchange. See Abstr. 7203 (1949), 5661 (1953).

F. LACHMAN

DMK RSH

SHUGUROV, V. K.

USSR/Atomic and Molecular Physics - Physics of the Atom, D-1

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34266

Author: Shugurov, V. K., Bolotin, A. B.

Institution: None

Title: Fine Structure of the Terms of Atoms of the Carbon and Nitrogen Type in the Configurations $1s^2 2s 2p^3$ and $1s^2 2s^2 2p^3$

Original Periodical: Mokslo darbai. Vilniaus valst. univ. Mat., fiz. ir chem. mokslu ser., 1956, 5, 41-47; Lithuanian resumé

Abstract: The work is devoted to the determination of the fine structure of terms of atoms of the carbon and nitrogen type, respectively, in the configurations $1s^2 2s 2p^3$ and $1s^2 2s^2 2p^3$. The calculation of the splitting is carried out with allowance for the nondiagonal elements the expressions for which contain terms that give interaction with the nucleus, and which therefore should give a considerable correction to the results obtained with the aid of only diagonal elements. The correction obtained by allowance for the nondiagonal elements reaches in the case of the 2P term of the Ne^{3+} atom in the $1s^2 2s^2 2p^3$ configuration a value of 50% of the total splitting. It follows from the results of the investigation that the Fok

1 of 2

- 1 -

USSR/Atomic and Molecular Physics - Physics of the Atom, D-1

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34266

Author: Shugurov, V. K., Bolotin, A. B.

Institution: None

Title: Fine Structure of the Terms of Atoms of the Carbin and Nitrogen Type in the Configurations $1s^2 2s 2p^3$ and $1s^2 2s^2 2p^3$

Original Periodical: Mokslo darbai. Vilniaus valst. univ. Mat., fiz. ir chem. mokslu ser., 1956, 5, 41-47; Lithuanian resumé

Abstract: functions give a splitting that is smaller than the experimental one, and the analytical function give a smaller one than obtained with the aid of the Fock functions.

GLEMBOKIS, J.; SUGUROVAS, V.; JUCYS, A.

Concerning the simplification of Fock equations. In Russian.

p. 3 (Lechemas, Gersonas) No. 2, 1957, Vilnius, Lithuania

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC; VOL. 7, NO. 1, JAN. 1958

SKVORTSOVA, G.S. [Skvorcova, G.]; SHUGUROV, V.K. [Sugurovas, V]; ERINGIS, K.K.
[Eringis, K.]

Analytic function of the basic condition of helium atoms. Liet ak
darbai B no.4:27-30 '59 (EBAI 9:3)

1. Vil'nyuskiy gosudarstvennyy universitat im. V. Kapsukasa i
Institut fiziki i matematiki AN Litovskoy SSR.
(Helium) (Atoms)

SOV/51-6-2-23/39

AUTHORS: Budrite, S.D., Kuzmitskito, L.L. and Shugurov, V.K.

TITLE: The Improved Analytical One-Electron Wave-Functions (Utochnennyye analiticheskiye odnoelektronnyye volnovyye funktsii)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 2, pp 245-247 (USSR)

ABSTRACT: The present paper shows how to find analytical functions which would give the same or nearly the same results as one-electron functions which are solutions in Fok's self-consistent field (Ref 1). The authors write down Fok's equations in the momentum space and solve them by successive approximations. They start with hydrogen functions. Since the hydrogen-functions (Ref 2) are very close to Fok's one-electron functions, it is sufficient to use the first approximation. The functions then obtained for various terms differ, in general, both in their parameters and their analytic form. The parameters are found from the condition of energy minimum. The authors follow this procedure to calculate wave-functions for helium-type atoms in their ground state. The results of their calculations are given in a table on p 247 where, for the sake of comparison, Morse's and Fok's functions (the latter obtained by Tsyunaytis et al., Ref 4) are also given. The table lists

Card 1/2

SOV/51-6-2-23/39

The Improved Analytical One-Electron Wave-Functions

all these wave-functions for He, Li⁺, Be⁺⁺ and B⁺⁺⁺ all of which are in the $1s^2$ configuration. Acknowledgments are made to Prof. A.P. Yutsis for his advice. There are 1 table and 4 references, 1 of which is Soviet, 1 German, 1 English and 1 mixed (German and English).

SUBMITTED: July 7, 1958

Card 2/2

VANAGAS, V.V.; KALADE, Yu.A. [Kalade, J.]; SHUGUROV, V.K.

The problem of interaction between nucleons. List ak darbai B no.3:
15-20 '60. (EEAI 10:3)

1. Vilnyusskiy gosudarstvennyy universitet im. V.Kapsukasa i
Institut fiziki i matematiki Akademii nauk Litovskoy SSR
(Nucleons) (Mesons) (Deuterons)

VORONKOVAS, Borisas; REMISAUSKAS, Mikalojus; SUGUROVAS, V., red.;
PETRAITIS, A., red.; PEREVICIUS, A., tekh. red.

[Theoretical mechanics] Teorine mechanika. Red. V.Sugurovas.
Vilnius, Valstybine politines ir mokslines literaturos leidykla,
1961. 782 p. (MIRA 15:3)

(Mechanics)

YUTSIS, A. P. [Jucys, A.], akademik; SHUGUROV, V. K. [Šigurovas, V.];
VIZBARAYTE, Ya. I. [Vizbaraite, J.]; ERINGIS, K. K. [Eringis, K.]

Calculation of matrix elements of operators by the extended calculation method. Liet ak darbai no.3:81-92 '61.

1. Institut fiziki i matematiki Akademii nauk Litovskoy SSR i Vil'nyusskiy gosudarstvennyy universitet im. V. Kapsukasa.

24, 6300

S/058/62/000/007/011/068
A061/A101

AUTHORS: Kalade, Yu. A., Shugurov, V. K.

TITLE: Spin-orbital nuclear interaction

PERIODICAL: Referativnyy zhurnal, Fizika, no. 7, 1962, 35, abstract 7A310
("Tr. AN LitSSR", 1961, v. B, 4(27), 35 - 44; Lith. summary)

TEXT: It has been attempted to explain the occurrence of a strong spin-orbital interaction in phenomenological nuclear potentials by proceeding from the assumption of a non-Euclidean space near nucleons. It has been found possible to select a metric which, at a distance of > 1 fermi, practically coincides with the Euclidean, such that, for low energies, calculations can be performed with the usual metric. The potential and metric tensor parameters are determined from the experimental deuteron characteristics. ✓B

[Abstracter's note: Complete translation]

Card 1/1

ERINGIS, K.K.; FRIDBERG, P.Sh.; SHUGUROV, V.K.

Fock's method extended to multiconfigurational approximations
for the helium atom. Opt. i spektr. 11 no.3:297-300 S '61.

(MIRA 14:9)

(Helium) (Quantum theory)

S/056/62/043/006/057/067
B102/B186

AUTHORS: Fridberg, P. Sh., Shugurov, V. K.

TITLE: To the problem of calculating the diamagnetic susceptibility of helium

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 6(12), 1962, 2308

TEXT: Though Damburg and Iolin (ZhETF, 42, 820, 1962) have calculated the mean square radius r^2 for the electron in the helium ground state with extremely high accuracy (80 variation parameters) their result (1.1935 at.un.) deviates greatly from experiment (1.220 ± 0.006). The authors used here a modified Fok method (DAN SSSR, 135, 809, 1960) and functions taken from Trudy AN LitSSR, B4, 27, 1959 and Optika i spektroskopiya, 11, 297, 1961, to calculate r^2 in threeconfiguration approximation (5 variation parameters). They obtained

	$1s^2$	$1s^2, 2p^2$	$1s^2, 2s^2$	$1s^2, 2s^2, 2p^2$
$\overline{r^2}$:	1.233	1.233	1.207	1.208

Card 1/2

To the problem of calculating the...

S/056/62/043/006/057/067
B102/B186

Agreement with experiment is good and can be further improved by about 0.005 if the contributions of the configurations $3s^2, 3p^2, 3d^2$ are taken into account. ✓

SUBMITTED: August 20, 1962

Card 2/2

FRIDBERG, P.Sh.; SHUGUROV, V.K.

Calculating the diamagnetic susceptibility of helium. Zhur.
eksp.i teor.fiz. 43 no.6:2308 D '62. (MIRA 16:1)
(Diamagnetism) (Helium)

L 12618-63

EWT(d)/FCC(w)/BDS AFFTC IJP(C)

ACCESSION NR: AP3001108

S/0208/63/003/003/0560/0564

AUTHOR: Bolotin, A. B.; Shugurov, V. K. (Vilnius)

52

TITLE: Transformation of a many-center integral to one center

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 3, no. 3, 1963, 560-564

TOPIC TAGS: electronic states of molecules, molecular orbitals, many-center integrals, Fourier transform

ABSTRACT: A method is presented for computing the many-center integrals (which arise in determining the electronic state of molecules) by reducing all atomic orbitals to one center by means of Fourier transform. Thus, one of the difficulties in sequential theoretical computation of electronic states of molecules is eliminated. Orig. art. has: 28 formulas and one graph.

ASSOCIATION: none

Card 1/2

KALADE, Yu. A.; SHUGUROV, V. K.

"Calculation of Form Factors of He³ and He⁴."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi,
14-22 Feb 64.

Vil'nyus State Univ.

L 11967-66 EWT(m) DIAAP

ACC NR: AP6001149

SOURCE CODE: UR/0367/65/002/003/0436/0440

AUTHOR: ^{44,55} Kalade, Yu. A.; ^{44,55} Pipirayte, P. P.; ^{44,55} Shugurov, V. K.

51
B

ORG: ^{44,55} Vilnius State University (Vil'nyussky gosudarstvennyy universitet)

TITLE: Theory of electromagnetic form factors of a three-nucleon system

19, 44,55

SOURCE: Yadernaya fizika, v.2, no. 3, 1965, 436-440

TOPIC TAGS: wave function, tritium, helium, nucleon

ABSTRACT: By using a wave function describing the motion of particles relative to the center of mass of a three-nucleon system, the authors calculated the energy of the ground state. The parameter of the radial part of the wave function is found from the energy minimum, and the function obtained is used to calculate the electro-magnetic form factors. In Fig. 1, curve 1 (case a) represents the form factor of the electric charge of the triton; curve 2, that of He³ when the ratio of parameters $\mu k = 1.4$; curves 3 and 4 represent the corresponding experimental data. In case b, the magnetic form factors are shown. Agreement with the experiment is considered satisfactory. Orig. art. has: 1 figure and 11 formulas.

Card 1/2

L 11967-66

ACC NR: AP6001149

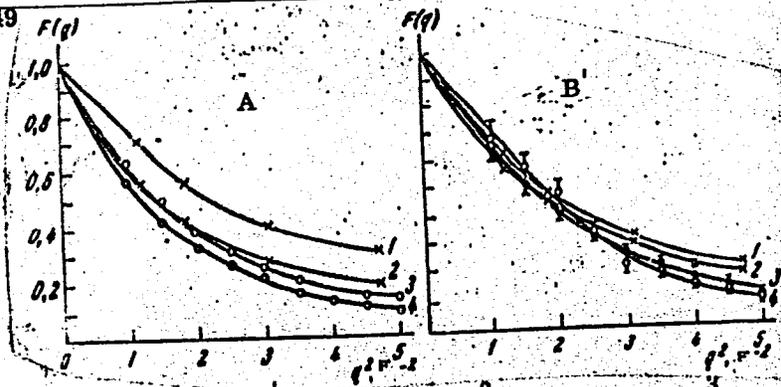


Fig. 1. Electric (a) and magnetic (b) form factors for H^3 (curve 1) and He^3 (curve 2); curves 3, 4 show the corresponding experimental data by H. Collard, R. Hofstadter et al. (Phys. Rev. Lett. 11, 132, 1963). The quantity q is measured in units of f^{-1} .

SUB CODE: 20/ SUBM DATE: 20Jan65/ ORIG REF: 006/ OTH REF: 007

beh
Card 2/2

CHUGAY, A.D.; LADIYEV, R. Ya.; GAVRILOV, B.M.; LOBURENKO, A.I.; SHUGUROV, V.S.

Processes for the manufacture of rubber adhesives and their automatic control. Kauch. i rez. 20 no.6:41-45 Je '61. (MIRA 14:6)

1. Kiyevskiy zavod "Krasnyy rezinshchik" i Institut avtomatiki Gosplana USSR.

(Rubber)
(Adhesives)
(Automatic control)

LADIYEV, R.Ya.; GAVRILOV, B.M.; SHUGUROV, V.S.; LOBURENKO, A.I.

Automation of the operations of the benzene retrieving system.
Kauch.i rez. 21 no.8:45-47 Ag '62. (MIRA 16:5)

1. Institut avtomatiki Gosplana UkrSSR.
(Rubber industry--Equipment and supplies)
(Automatic control)
(Benzene)

L 33223-65 EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EPR/EPA(w)-2/EPA(bb)-2/EWP(b)
Pab-10/Pq-4/Pr-4/Ps-4/Pt-10/Pu-4 WW/WH

ACCESSION NR: AP4012578

S/0072/64/000/002/0037/0039

AUTHOR: Logvinenko, A.T. (Candidate of technical sciences); Kogan, S.A. (Engineer);
Shugurova, N.A. (Engineer)

TITLE: Pulverulent quartz raw material for enamels

62
59
B

SOURCE: Steklo i keramika, no. 2, 1964, 37-39

TOPIC TAGS: pulverulent quartz, enamel, silicon dioxide content, dispersion, priming, coating enamel

ABSTRACT: There are large deposits of pulverulent quartz in Western Siberia and the Urals which can serve as a source of silica raw material. The use of such quartz in various branches of industry has continually expanded, except in the

Although the silica content is lower

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L 33223-65

ACCESSION NR: AP4012578

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ties, they all comprise the frit and are not an obstacle in the use of pulverulent quartz. The fine particle size does not cause difficulties in operation, ensures batch uniformity, rapid reaction with other components during boiling, and complete melting and fining in the rotary furnace process. Research indicated that pulverulent quartz of the Yelbashinskoye deposit can be used to melt frit of boric, non-boric primings and coating enamels. Time of fusion as compared to that of quartz sand is 10-15% less. Orig. art. has: 2 figures.

ASSOCIATION: [Logvinenko, A.T.] Khimiko-metallurgicheskiy institut SO AN SSSR (Chemical-metallurgical Institute SO AN SSSR); [Kogan, S.A.] Novosibirskiy metallur-
gicheskiy zavod imeni A. N. Kuz'mina (A.N. Kuz'min New Siberia Metallurgical Fac-

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 004

OTHER: 002

Card 2/2

ABRAMOV, N.V.; BILALOV, I.G.; KOLYEV, Y.A.; KULIKOV, L.O.; YANUSOVA, L.S.;
SINCHUROVA, N.A.

Nature of the variation of the composition of solutions in the
formation process of the fluorite-bearing chambered pegmatite.
Dokl. AN SSSR 164 no.5:1147-1150 0 1965.

(MIRA 18:10)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.
Submitted February 15, 1965.

N. I.
YUDENICH, Grigoriy Ivanovich, doktor tekhnicheskikh nauk, professor;
TROIITSKIY, A.V., redaktor; SHUGUROVA, N.I., gornyy inzhener,
retsenzent; TKACHEV, D.M., gornyy inzhener, retsenzent; KAZAKOVA,
M.G., gornyy inzhener, retsenzent; BATANOV, A.I., gornyy inzhener,
retsenzent; MIKHAYLOVA, V.V., tekhnicheskiiy redaktor

[Dressing iron and manganese ores] Obogashchenie zheleznykh i
margantsevykh rud. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry no
chernoi i tsvetnoi metallurgii, 1955. 624 p. (MIRA 9:3)
(Iron ores) (Manganese ores) (Ore dressing)

C. A.

Alkyl esters of phosphonocarboxylic acids. Gil'm Kamal and E. I. Shugurova (S. M. Kirov Chem.-Technol. Inst., Kazan). *Doklady Akad. Nauk S.S.S.R.* 72, 301-4 (1970). Reaction of esters of halogen-substituted aliphatic acids with either (RO)₂P or (RO)₂PONa was used to prep. the following esters (there is no indication as to which method was used to obtain the yields given in parentheses): (RO)₂P(O)CO₂Et (R given): Me (no yield given) b_{97-8°}, d₄²⁰ 1.4114; *iso*-Pr (62.3%), b_{130-30.5°}, d₄²⁰ 1.0703, n_D 1.4185; Pr (45.3%), b_{143.5-4.5°}, d₄²⁰ 1.0980, n_D 1.4241; Bu (41.5%), b_{161-2°}, d₄²⁰ 1.0599, n_D 1.4303; *iso*-Am (47.7%), b_{169-70°}, d₄²⁰ 1.0312, n_D 1.4326. (RO)₂P(O)CH₂CO₂Et: Me (45%), b_{134.5-5.0°}, d₄²⁰ 1.2053, n_D 1.4302; *iso*-Pr (49%), b_{142-3°}, d₄²⁰ 1.0776, n_D 1.4285; Pr (58.3%), b_{155.5-6.0°}, d₄²⁰ 1.0821, n_D 1.4292; Bu (49.2%), b_{170.5-7.0°}, d₄²⁰ 1.0559, n_D 1.4335; *iso*-Am (47.9%), b_{170-80°}, d₄²⁰ 1.0254, n_D 1.4371. (RO)₂P(O)CHMeCO₂Et: *iso*-Pr (49.9%), b_{134.5-5.5°}, d₄²⁰ 1.0440, n_D 1.4238; *iso*-Bu (53.1%), b_{161.5-8.5°}, d₄²⁰ 1.0380, n_D 1.4351; *iso*-Am (38.4%), b_{181-2°}, d₄²⁰ 1.0011, n_D 1.4380. (RO)₂P(O)CMe₂CO₂Et: *iso*-Pr (49.1%), b_{134-5°}, d₄²⁰ 1.0197, n_D 1.4258; *iso*-Bu (35.9%), b_{160-1°}, d₄²⁰ 1.0211, n_D 1.4332. All but the 1st compd. yielded the corresponding free acids (undescribed procedure

or results) on hydrolysis. Allyl alc. with PCl₅ yielded diallyl phosphite, b_{97.5-8.5°}, d₄²⁰ 1.0001, d₄²⁰ 1.0701, n_D 1.4430, which easily adds Br and reacts with Na, yielding the Na derivative, which with esters of halogenated acids yielded (C₂H₅O)₂P(O)CO₂Et (31.5%), b_{153-4°}, d₄²⁰ 1.11306, n_D 1.4460, and (C₂H₅O)₂P(O)CH₂CO₂Et (30.1%), b_{155.5-6.5°}, d₄²⁰ 1.1384, n_D 1.4514; the above results were obtained only if Et₂O was used as the solvent; use of EtOH in both instances gave no phosphonates and only (EtO)₂CO and EtOCH₂CO₂Et, resp., were isolated, while the diallyl phosphite was recovered. This result is explained by the equil. shift in the system: (RO)₂POH + EtONa ⇌ (RO)₂PONa + EtOH in the presence of much EtOH (cf. Kozolapoff, *C.A.* 40, 4658¹). The above phosphonocarboxylates with PhNH₂ or *p*-MeC₆H₄NH₂ and also NH₃ gave largely the corresponding amides at the C atom only. G. M. K.

USSR/Chemistry - Organophosphorus Compounds Apr 51

"Diallylphosphorous Acid and Its Derivatives," Ye. I. Shugurova, Gil'm Kamay, Lab of Tech of Org Synthesis, Kazan' Chemicotech. Inst imeni S. M. Kirov

"Zhur Obshch Khim" Vol XXI, No 4, pp 658-662

Synthesized and studied for 1st time diallylphosphorous acid, 1st rep of unsaturated esters of phosphorous acid. Obtained diallylphosphono formic acid ester and diallylphosphono acetic acid ester by interaction of Na deriv of diallylphosphorous

182T18

USSR/Chemistry - Organophosphorus Compounds (Contd) Apr 51

acid with corr esters of chloro-carbonic or chloro-acetic acid. Proposes hypothesis for formation of diethylcarbonate and ethoxyacetic ester when above syntheses are carried out in alc.

182T18

SHUGUROVA, YE. I.

USSR/Chemistry - Organophosphorus
Compounds

1 Aug 51

"Amides of Dialkylphosphonocarboxylic Acids and Their Derivatives," Gil'm Kamay, Ye. I. Shugurova, Kazan' Chem-Tech Inst imeni S. M. Kirov

"Dok Ak Nauk SSSR" Vol LXXIX, No 4, pp 605-607

Prepd alkyl esters of phosphonocarboxylic acids (I) as described in "Dok Ak Nauk SSSR" Vol LXXII, 1950, p 301. Reacted them with ammonia according to P. Nilen to prep amides. In some cases, obtained amides of dialkylphosphonoacetic acid by reacting

211T28

trialkylphosphites with monochloroacetamide. Reacted I with aniline or p-toluidine to obtain N-aryl amides. Lists melting points of 7 dialkylphosphonoformamides and the corresponding acetamides as well as of 8 monophenylamides of dialkylphosphoacetic and propionic acids and the corresponding monoparatolylamides. Describes monoarylamides of phosphonomalonic acids which were obtained as by-products and their behavior on treatment with alcoholic ammonia (fission of P-C bond).

211T28

SHUGUROVA, YE. I.

SHUGUROVA, E. I., And KAMAY, G.

"Some Esters of Phosphonoformic and Phosphonoacetic Acids and Their Amides," Trudy Kezansk Khim. Tekh. Inst. im. S.M. Kirov, pp 21-33, 1952, Vol. 17.

Evaluation B 3,075,646 Translation in Library.

SHUGUROVA, YE I.

KHAKH, SIL'N, and SHUGUROVA, YE. I.

"Some Esters of Phosphonformic and Phosphonacetic Acids and Amide Derivatives."

Tr. Kazansk. Khim.-Tekhnol. In-ta, No 17, pp 21-33, 1953

Prepared a number of ethyl esters of dialkylphosphonformic and dialkylphosphonacetic acids. The amides were prepared by treating the above esters with NH_3 . (RZhKhim, No 20, 1954)

30: Sun, No 606, 5 Aug 55

SHUGUROVA, E.

Some esters of phosphonoformic and phosphonoacetic acids, and their amido derivatives. Gil'm Kamaj and E. I. Shugurova. *Trudy Kazan. Khim.-Tehno. Inst.* 1953, No. 11, 21-33; *Referat. Zhur., Khim.* 1934, No. 44007.—A number of Et dialkylphosphonoformates, $(RO)_2P(O)CO_2Et$ (A), and Et dialkylphosphonoacetates, $(RO)_2P(O)CH_2CO_2Et$ (B) were obtained by the action of EtO_3Cl (I) and CH_2ClCO_2Et (II) on Na dialkyl phosphite. By treating the esters with NH_3 in abs. alc. followed by keeping the reaction mixt. for several days the corresponding amides were obtained. The m.ps. of these amides increase regularly in their homolog series. By heating B with aniline or *p*-toluidine were obtained the corresponding anilides and *p*-toluidides, of $(RO)_2P(O)CH_2CO_2H$. A (R = Me), b_p 87-8°; d_4^{20} 1.1614, was obtained in 60.4% yield by treating Na di-Me phosphite with 27.5 g. I (the Na salt was obtained from 30 g. di-Me H phosphite (III) and 5.85 g. Na in 120 ml. abs. ether); amide, m. 99.5°. In an analogous manner 30 g. di-iso-Pr H phosphite (IV), 4.16 g. Na, and 19.8 g. I yielded 62.3% A (R = iso-Pr), b_p 130-1°, n_D^{20} 1.4185, d_4^{20} 1.0762, d_4^{25} 1.0599; amide, m. 163°. Di-Pr H phosphite (V) (40 g.), 5.54 g. Na, and 26.2 g. I yielded approx. 76% A (R = Pr), b_p 143.5-45°, n_D^{20} 1.4371, d_4^{20} 1.0989, d_4^{25} 1.0837; amide, m. 178°. From 20 g. of di-Bu H

phosphite (VI), 2.4 g. Na, and 11.25 g. I was obtained 41.5% A (R = Bu), b_p 161-2°, n_D^{20} 1.4303, d_4^{20} 1.0599, d_4^{25} 1.0468; amide, m. 192°. From 26 g. di-iso-Am H phosphite (VII), 2.6 g. Na, and 12.3 g. I was obtained 49% A (R = iso-Am), n_D^{20} 1.4326, d_4^{20} 1.0312, d_4^{25} 1.0170; amide, m. 198.5°. III (20 g.), 4.2 g. Na, and 22.3 g. II gave 45% B (R = Me), b_p 134.5°, n_D^{20} 1.4302, d_4^{20} 1.2658, d_4^{25} 1.1878; amide, m. 46°; anilide, m. 174°; toluide, m. 216°. From 30 g. IV, 4.16 g. Na, and 23.1 g. II was obtained 49% B (R = iso-Pr), b_p 142-3°, n_D^{20} 1.4225, d_4^{20} 1.0776, d_4^{25} 1.0602; amide, m. 81°; anilide, m. 156°; toluide, m. 178°. V (40 g.), 5.54 g. Na, and 29.5 g. II yielded 53.3% B (R = Pr), b_p 155.5-56°, n_D^{20} 1.4292, d_4^{20} 1.0821, d_4^{25} 1.0648; amide, m. 87°; toluide, m. 182°. VI (20 g.), 2.4 g. Na, and 12.7 g. II produced 49.2% B (R = Bu), b_p 176-7°, n_D^{20} 1.4355, d_4^{20} 1.0559, d_4^{25} 1.0382; amide, m. 180°; anilide, m. 122°; toluide, m. 151°. From B (R = iso-Bu), b_p 170-1°, n_D^{20} 1.4347, d_4^{20} 1.0363, d_4^{25} 1.0212, was obtained the amide, m. 97°; anilide, m. 143°; toluide, m. 167.5°. VII (25 g.), 2.6 g. Na, and 13.8 g. II yielded 47.9% B (R = iso-Am), b_p 179-80°, n_D^{20} 1.4371, d_4^{20} 1.0254, d_4^{25} 1.0108; amide, m. 114.5°; anilide, m. 117°; toluide, m. 156°.

M. Hoesch.

SHUIN, K.A.; YEFIMOV, M.V.

Some results of using trace elements in the plant breeding of
Buryat-Mongolia. Trudy BKNII no.4:46-50 '60. (MIRA 15:3)
(Buryat-Mongolia--Plants, Effect of trace elements on)

YEFIMOV, M.V.; SHUIN, K.A.

Diurnal variations in the photosynthesis of tomatoes and cabbage in
Transbaikalia. Trudy BKNII no.4:195-202 '60. (MIRA 15:3)
(Transbaikalia--Cabbage) (Transbaikalia-- Tomatoes)
(Photosynthesis)